

Known Difference Between IP330 and the IP330A

The IP330A has been designed as a drop-in replacement for the IP330. The known differences between the models include increased conversion rate, additional power requirements, module start-up time, and other general board specifications.

Increased Conversion Rate

The IP330A has a conversion time of 5 μ S, resulting in a maximum conversion rate of 200KHz. As a result of the increased speed of the module all interrupts will occur 5 μ S after the event. This is a decrease of approximately 3 μ S from the IP330.

Increased Power Requirements

The modernization of the IP330 has placed additional power demands on the +5V power source as detailed in the table below. The $\pm 12V/\pm 15V$ power requirements remained unchanged.

+5V	Typical	Maximum
IP330	30 mA	40 mA
IP330A	65 mA	200 mA

Calibration Voltage

The worst case temperature drift on the calibration voltage reference has increased from $\pm 6\text{ppm}/^\circ\text{C}$ to $\pm 10\text{ppm}/^\circ\text{C}$. This may result in slightly larger errors in the calibration voltage over extreme temperatures.

Other Features

➤ Start-Up Time

The IP330A requires a maximum of 200mS of configuration time immediately after power-up. During this period, the IP module will not respond to any input.

➤ Reset Debounce

The IP reset line now includes 125nS of debounce to increase noise immunity.

➤ Read/Write Operations

All registers on the IP330A support both Byte and Word operations.